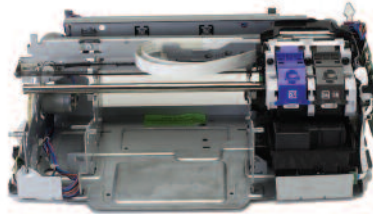# HP Scanning Imagers 500R/800R

HP Scanning Imager 500R

HP Scanning Imager 800R

The HP Scanning Imagers 500R and 800R offer OEMs a proven, versatile, color inkjet printer platform that minimizes development costs and effort, and speeds time-to-market.

The HP Scanning Imager 500R (Q2287L) and Scanning Imager 800R (Q2288L) offer a proven, compact, printer development platform that uses advanced color thermal inkjet technology (TIJ). HP Scanning Imagers and software are perfect for OEMs who:

- Develop customized solutions for specialized commercial applications that require short run, print-on-demand, high-quality color printing.
- Want a cost-effective flexible development platform already tested and validated with HP's proven expertise.
- Value the advantages of TIJ and the competitive edge that comes from partnering with a recognized technology leader.

Flexibility of design and a range of components combine to provide the functionality you and your customers need. This is a compact, easy-to-integrate printing solution.

Choice of print zone sizes

The Scanning Imager 500R is designed with a 5-inch print zone, which is ideal for compact, specialized printing of smaller media, such as labels and CD/DVDs. Customized media path development is left to the OEM.

The Scanning Imager 800R has an 8.5-inch print zone, which supports a wider range of media sizes. This device is especially suitable for applications that use larger media, such as point-of-purchase signage. The Scanning Imager 800R includes a standard media path, but OEMs can replace it with their own custom media path.

Reliable HP print mechanisms
Both of these scanning imagers include:

- Scanning print mechanism
- Two print cartridge stalls
- Cartridge service station
- Media feed shaft with motor assembly and a mechanical interface for an OEM-supplied media path

The imagers are quiet, compact and designed to provide easy access to the print cartridges. They are capable of excellent print speeds across a variety of applications. The Scanning Imager 800R also includes a product shell, which can be replaced to meet OEM requirements.

Proven HP electronics
The Scanning Imager 500R and Scanning Imager 800R use tested and validated HP application-specific integrated circuits (ASICs) for the imaging pipeline, motor control, and host interfaces.

To provide flexibility for addressing an OEM's application requirements, these devices are designed with flash ROM for microcode storage. By utilizing the flash ROM, OEMs can configure the printer for its unique operational flows and manage firmware upgrades more efficiently.

These devices support user interface and ease-of-use features, such as a print cancellation button and print speed/quality selection switches, and OEMs can choose which features they want to implement.

HP Scanning Imagers 500R and 800R combine advanced color inkjet technology with a versatile software driver to help OEMs achieve a competitive edge.
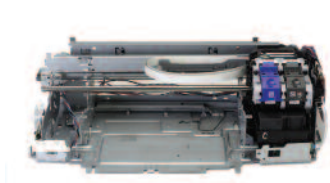
Customizable software driver

To facilitate quick integration, HP designed a software driver for the Scanning Imagers 500R and 800R that permits extensive OEM customization. OEMs can modify media path control, as well as system operational flows, to handle their unique media path and printing process requirements. Print modes and color maps can be optimized to meet media requirements, as well as product performance and print quality specifications.

The driver can also be tailored to present a feature-rich user interface (with or without OEM brand identity) or a simplified driver that offers only the functions required for the application, such as:

- Print-quality controls to balance speed versus resolution
- Media type and copy selection
- Layout controls (orientation, size, scaling, mirror image, and borderless printing)
- Color controls and grayscale printing
- Print status and ink status indicators

Scanning Imager 800R w/o paper path and product shell

Outstanding color print quality

The Scanning Imager 500R and Scanning Imager 800R offer HP PhotoREt III four-color ink systems.

HP PhotoREt III – HP's photo resolution enhancement technology uses four-color printing to provide an optimal combination of print quality and performance that is suitable for most applications. This technology combines a pigment-based black print cartridge with a dye-based tri-color (CMY) print cartridge to produce high-quality images and crisp, laser-like text.

Depending on the media, this system can achieve outstanding lightfastness and fade resistance for up to 60+ years.

Versatile, economic, high-quality print cartridges

The HP Scanning Imagers 500R and 800R are designed to work with HP 56 (black) and HP 57 (tri-color) Photo-Quality print cartridges. These print cartridges offer all the advantages of HP's latest inkjet technology. Hundreds of tiny nozzles, firing up to 18 kHz, allow high-quality printing at high speeds.

Small drop size and precise ink drop placement produce consistently superb image and text quality in color and black-and-white on a wide variety of media.

HP Photo-Quality print cartridges

HP's Photo-Quality print cartridges offer:

- Exceptional print quality—the small drop size provides high-resolution black-and-white and color prints over a wide range of media.
- Superior photo quality—the four-color ink system produces long-lasting, brilliant colors.
- Compact design—low-profile packaging saves space, so companies can build smaller products.
- Proven reliability—HP's worldwide recognition for product quality, reliability, and service creates a winning combination for our OEM partners.
- Ease-of-use—simple, quick replacement minimizes downtime.
- Economical output—efficient ink delivery system provides a low cost-per-page advantage.
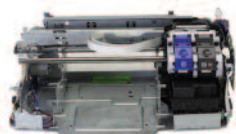
When purchased in volume, these cartridges can be customized, extending the range of an OEM's product offerings with proven high-quality HP technology.

HP engineering expertise and support

HP works with you to quickly adapt and customize these scanning imagers to meet your particular market needs for specialized application printers.These products provide a high return on investment compared to standard consumer printing platforms.

HP Scanning Imagers 500R/800R

Scanning imager technical specifications

	HP Scanning Imager 500R	HP Scanning Imager 800R
P/N	Q2287L	Q2288L
Scanning print zone	5.0 in.	8.5 in.
Print cartridges	Four-color system: HP 56 (C8856A) plus HP 57 (C8857A)	Four-color system: HP 56 (C8856A) plus HP 57 (C8857A)
Print resolution	Black: up to 1200 x 1200 dpi	Black: up to 1200 x 1200 dpi
	Color: up to 4800 x 1200 optimized dpi	Color: up to 4800 x 1200 optimized dpi
Print speed (draft mode)*	Up to 5 in./sec	Up to 4 in./sec
Design life	60,000 pages	60,000 pages
Interfaces	USB 1.1, parallel, GPIO	USB 1.1, parallel, GPIO
Operating system	Windows 2000, Windows XP, Windows Vista	Windows 2000, Windows XP, Windows Vista
Power requirements	32 VDC and 16 VDC	32 VDC and 16 VDC
Power consumption (avg. printing)	22 W maximum	22 W maximum
Power supply requirements	Input: 100 - 240 V~, 50/60 Hz, 1 A RMS maximum	Input: 100 - 240 V~, 50/60 Hz, 1 A RMS maximum
	Output: 32 VDC, 700 mA, 16 VDC 625 mA	Output: 32 VDC, 700 mA, 16 VDC 625 mA
Recommended operating conditions	15 to 35° C, 20% to 80% RH	15 to 35° C, 20% to 80% RH
Non-operating conditions	-40 to 70° C	-40 to 70° C
Dimensions (w x d x h)	14.0 in. x 7.25 in. x 5.25 in.	17.7 in. x 14.6 in. x 5.7 in.
	355.6 mm x 184.2 mm x 133.4 mm	448.8 mm x 370.5 mm x 145.0 mm
Weight	6.2 lb/2.8 kg	11.7 lb/5.3 kg

* Based on HP IPG consumer printing speed tests. Speed results vary based on image type and pipeline. See **http://www.hp.com/products1/inkjetprinter/printing_speed_contentonly.html**

Print cartridge technical specifications

	HP 56 Black Inkjet Print Cartridge	HP 57 Tri-color Inkjet Print Cartridge
P/N	C8856A	C8857A
Ink type	Black pigmented aqueous ink	Cyan, magenta, and yellow dye-based aqueous ink
Resolution	1200 dpi	300 dpi
Nozzle count	416	300 (3 x 100)
Print swath	.35 in.	.33 in.
Maximum firing frequency	18 kHz	18 kHz
Avg. drop volume	16 pl	5 pl
Avg. delivered ink (ccs)	19 ml	17 ml
Print cartridge yields	450 pages of 5% density	391 pages of 15% density
Dimensions (w x d x h)	48.1 mm x 31.0 mm x 46.1 mm	48.1 mm x 31.0 mm x 46.1 mm
Recommended operating conditions	15 to 35° C, 20% to 80% RH	15 to 35° C, 20% to 80% RH
Shipping/storage conditions (in original packaging only)	Approx. -5° C to 40° C, 5% to 95% RH	Approx. -5° C to 40° C, 5% to 95% RH

HP Scanning Imagers 500R/800R

Frequently asked questions

Who are the intended users of the HP Scanning Imagers 500R and 800R?	Companies who develop, manufacture and market commercial applications that call for short-run, print-on-demand, high-quality color and black-and-white printing.
What are their key advantages?	• **Flexible design** Choose from a range of components and customizable software features to quickly develop the solution that best meets your needs. • **State-of-the-art technology** Uses HP's most advanced thermal inkjet technology (TIJ) to produce superior print quality and economical results. • **Shortened time to market** Provides hardware and software that are already tested and validated by a recognized industry leader. • **Higher return on investment** Components will remain available through October 2013. • **HP support** Offers tools and services to make the most of your expertise in vertical market applications and HP's expertise in thermal inkjet technology.
What are the advantages of HP Thermal Inkjet (TIJ) Technology?	• **Cost-effective** Requires no warm-up cycle and no downtime. When it's time to replace a print cartridge, replace only the one that's needed. • **Easy to use** No special training is required to operate and maintain thermal inkjet printers. The print cartridge design allows it to be snapped in and out for easy replacement. • **Fast** Hundreds of tiny nozzles firing at a high frequency allow high-quality printing at high speeds. • **Reliable** TIJ is less sensitive to air bubbles in the firing chamber than other printing technologies, avoiding print quality problems and delays caused by trapped air. • **Flexible** Supports a wide variety of media. • **High quality** TIJ places smaller drops more accurately, producing consistently superb image and text quality. • **Environmentally responsible** With thermal inkjet, there is no need for service technicians qualified to handle volatile solvents, and no noxious fumes. • **Lower cost of ownership** A thermal inkjet printer can cost tens to hundreds of thousands of dollars less than other printing equipment, reducing the market entry cost.
Why choose HP?	HP is the worldwide leader in imaging and printing technologies. We bring our innovative, reliable, environmentally-responsible, and easy-to-use solutions to a variety of industrial markets. As pioneers of thermal inkjet printing, HP knows the technology inside and out.

Ordering information

Product number	HP product
Q2287L	HP Scanning Imager 500R
Q2288L	HP Scanning Imager 800R
Q2342A	HP Scanning Imager 500R/800R Software License
CG676A	Universal Power Supply
C8856A	HP 56 Black Inkjet Print Cartridge
C8857A	HP 57 Tri-color Inkjet Print Cartridge

Contact information

To discuss inkjet technology OEM opportunities with HP:

• Go to **www.hp.com/go/oeminkjet** and send us an email message.

• Mail your inquiry to:
Hewlett-Packard Company
Specialty Printing Systems
Mailstop 66-654
16399 West Bernardo Drive
San Diego, CA 92127, USA

To learn more, visit www.hp.com/go/oeminkjet